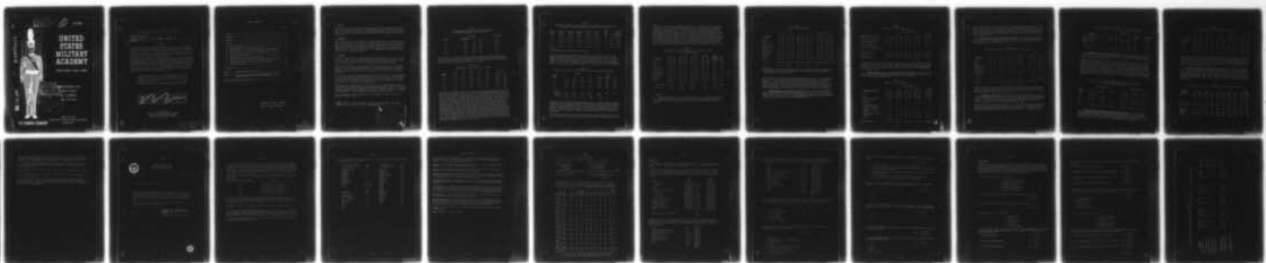


AD-A077 812 MILITARY ACADEMY WEST POINT NY OFFICE OF THE DIRECTO--ETC F/6 5/9
COMPARISON OF TIME USAGE BY CADETS, 1971 VS 1975, (U)
MAR 76 C F BRIDGES, T G DAVIDSON

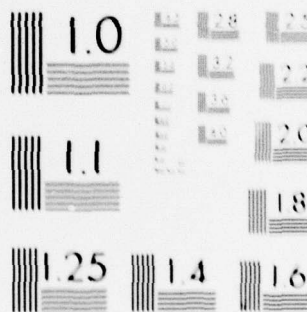
UNCLASSIFIED 9B2.01-76-012

NL

| OF |
AD
A077812



END
DATE
FILMED
1-80
DDC



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

LEVEL

①

76-012

AD A 077812



UNITED STATES MILITARY ACADEMY

WEST POINT · NEW YORK

DDC

RECEIVED
DEC 10 1979
A

COMPARISON OF
TIME USAGE
BY CADETS,
1971 VS 1975

DISTRIBUTION STATEMENT A

Approved for public release
Distribution Unlimited

79 20 9 221

DDC FILE COPY

TY-HONOR-COUNTRY

OFFICE OF THE
DIRECTOR OF INSTITUTIONAL RESEARCH
MARCH 1976

6
14
11
10
12 27
COMPARISON OF TIME USAGE BY CADETS, 1971 VS 1975

Report No. 9B2.01-76-012

Project No. 214

Prepared by: Mr. Claude F. Bridges and Mr. Ted G. Davidson

March 1976

ABSTRACT

For an assigned day during the period 8-12 December 1975, each cadet was asked to keep a log of the time he spent on each major type of activity, essentially replicating the time survey conducted during the period 29 March - 3 April 1971.

Comparisons of the two sets of data indicate that, in one week, cadets typically devote about one hour less to class, four hours more to studying, and almost five hours less to sleeping than they did in 1971.

There were several indications of appreciable improvement in the match between the demands on the cadets and the time and energy available and attitude towards meeting these demands. In spite of sleeping 41 minutes less per day, there were significant decreases in perceived cumulative fatigue, inadequacy of time to meet demands, and in the percent of extra time that would be used for sleeping.

Significantly less time is devoted to organized physical activities, but more time is spent on extracurricular activities. The load on the First Classmen remains greater than that on other classes.

NOTE: Any conclusions in this report are not to be construed as official U. S. Military Academy or Department of the Army positions unless so designated by other authorized documents.

DISTRIBUTION: This document is prepared for official purposes only. Its contents may not be reproduced or distributed (in whole or in part) without specific permission of the Superintendent, U. S. Military Academy, in each instance.

OFFICE OF THE
DIRECTOR OF INSTITUTIONAL RESEARCH
UNITED STATES MILITARY ACADEMY
WEST POINT, NEW YORK 10996

503
DISTRIBUTION STATEMENT A

Approved for public release
Distribution Unlimited

406 247

TABLE OF CONTENTS

	Page
1. PURPOSE.....	1
2. BACKGROUND.....	1
3. PROCEDURE.....	1
4. RESULTS.....	4
a. Cadet Use of Time.....	4
b. Overall Adequacy of Time for All Activities.....	5
c. Judged Adequacy of Time to Complete Academic Study Assignments....	6
d. How Cadets Would Use Any Extra Time Provided Them.....	7
e. Cumulative Fatigue Status.....	7
f. The Hardest Year in Terms of Required Load.....	8
g. Extent of Active Participation in Extracurricular Activities.....	8
h. Intensive Participation in Extracurricular Activities.....	9
i. Use of Time for Week.....	10
5. SUMMARY.....	11
APPENDIX I - Questionnaire and Cover Letter.....	13
APPENDIX II - Percent of Class Giving Each Characterization of "Usual Cumulative Fatigue Status" in 1975 and 1971.....	23
REPORT DOCUMENTATION PAGE (DD Form 1473).....	23

Programmer: Gregory J. Warzala

Typist: Susan M. Griffiths

TABLE 1
THE USABLE SAMPLES FOR EACH CLASS AND PERCENT OF THE
RESPECTIVE POPULATIONS IN 1975 AND IN 1971

Class	1975 Sample			1971 Sample
	Population	N	%	%
1 ^o	877	571	65.1%	91.3%
2 ^o	896	673	75.1	93.2
3 ^o	1083	861	79.8	90.4
4 ^o	1262	994	78.8	92.5
Corps	4118	3011	75.3	91.8

Since the percent of cadets returning questionnaires with any usable data was so much less than in the preceding study, especially for the First Class, the conformance of the samples to expected criteria was checked further. Various characteristics of the sampling distributions are shown in the Tables 2A, 2B, and 2C.

TABLE 2A
DISTRIBUTION OF CLASS SAMPLES BY DAY OF WEEK

Sample	Mon.	Tue.	Wed.	Thu.	Fri.	Total	N
	%	%	%	%	%	%	
1 ^o	22.1%	16.9%	24.3%	17.0%	19.7%	100.0%	534
2 ^o	25.3	18.4	20.5	18.7	17.1	100.0	620
3 ^o	25.6	16.0	25.8	16.1	16.5	100.0	800
4 ^o	20.1	19.3	19.0	21.0	20.5	100.0	884
Corps	23.2	17.7	22.2	18.4	18.5	100.0	2838

Table 2A shows the percent of each Class and of the Corps that reported their time usage data for each given day of the week. For precisely equitable distribution of the five-day total, each of these figures would be 20%. The distributions for the Third Class and for the Corps deviated significantly from such even 20% distributions (Chi square tests, both p's less than .005). Thus, Monday and Wednesday will have about 5% greater gross weight in the weekday time usage total than will the other weekdays. The effect of this divergence on the weekday time use averages in each of the nine categories should be relatively minor. However, it does not negate the possibility that the missing data biased the results, especially for the First Class, in which data are missing for one-third of the class. Thus, Cadets were requested to report their weekday time usage in accordance with their next to last digit of their cadet number, so the significant divergence from equal representation of each weekday could result from chance fluctuations in the number of cadets having each possible digit. Detailed comparisons were made of the percent of each class reporting for each weekday with the percent that should have done so. Table 2B summarizes some of the results. The two sets of percentages agree much more closely. Furthermore, 80.1% of the Corps made reports for the day assigned, and the respective regressions of digit on day reported (Eta day/digit) were all substantial and statistically significant (F test, all p's < .001).

TABLE 2B
PERCENTAGE DISTRIBUTION OF CLASS SAMPLES BY DAY-OF-WEEK FOR WHICH TIME USAGE
WAS REPORTED AND, WITHIN PARENTHESES, FOR WHICH IT WAS REQUESTED

Sample Class	Monday (0-1)*	Tuesday (2-3)	Wednesday (4-5)	Thursday (6-7)	Friday (8-9)	Eta Day/ Digit	N	Total % on Day Requested
1 ^o	22 (22)	17 (21)	24 (19)	17 (18)	20 (20)	.81	534	81.1%
2 ^o	25 (23)	18 (19)	20 (20)	19 (19)	17 (19)	.81	620	81.9%
3 ^o	26 (23)	16 (20)	26 (21)	16 (17)	17 (20)	.72	800	76.4%
4 ^o	20 (21)	19 (20)	19 (21)	21 (20)	20 (19)	.81	884	80.9%
Corps	23 (22)	18 (20)	22 (20)	18 (18)	19 (19)	.78	2838	80.1%

*Corresponding next to last digit of Cadet Number.

Since the Regiments had the immediate responsibility for distributing the forms with appropriate instructions and for collecting the completed ones, the possibility that regiments differed significantly in their returns was checked out. First, the number of cadets in a given Class and assigned to a given regiment the week of the survey were divided into the number of completed forms they returned. The results, as summarized in Table 2C, show no consistent or marked divergence, by regiments, in percentages returned.

TABLE 2C
PERCENT OF THE CADETS IN EACH REGIMENT AND CLASS WHO RETURNED QUESTIONNAIRES

Class Year	Regiment				Totals		
	1	2	3	4	Class	Sample	%
1 ^o	70.9%	63.8%	60.5%	69.2%	876	563	64.3%
2 ^o	81.7	68.9	73.8	72.2	894	663	74.2
3 ^o	78.6	82.7	75.2	77.2	1083	849	78.4
4 ^o	73.1	81.6	78.0	79.0	1262	984	78.0
Totals:							
Regiment N	984	1015	1075	1041	4115	3059	74.3%
Sample N	748	767	776	768	3059	-	-
%	76.0%	75.6%	72.2%	79.8%	74.3%	-	-

Furthermore, the distribution within each class, and in the Corps, of regiment versus day reported and versus day assigned neither met statistical significance criteria (analysis of variance, all p's greater than .05). Only for the Third Classmen did the two sets of distributions approach statistically significant departure from randomness (p's respectively = .375 and .094). For this class, only in the Fourth Regiment was departure of frequencies for day reported not closely in accord with the departure of frequencies for day assigned.

A final test was made both for its possible relevance to the representativeness issue and for the implications of any differences between the regiments in cadets' typical use of

weekday time. The results are summarized in Table 2D. For no regiment did the percent of the day devoted to a given activity differ more than one percent from the corresponding percent for the mean of all four regiments. However, there were some noteworthy differences between the regiments. The First Regiment as a whole spent appreciably more time than the others on Official Business and less time on Optional/Recreational. The Second Regiment conversely spent more time on Optional/Recreational and less time on Official Business than did the other regiments. With the large number of cadets involved, these differences probably would be statistically significant, but even the largest deviation is only 10 minutes. They may reflect significant trends, but their magnitude seems to have little practical meaning. All of these data suggest that the results obtained from the usable questionnaires for each class should not differ meaningfully from the results, had time logs been obtained similarly from all of the cadets for an entire week.

TABLE 2D
MEAN WEEKDAY TIME USE (IN MINUTES AND % OF TOTAL) AS REPORTED
BY CADETS IN EACH REGIMENT

Activity	1st Reg		2nd Reg		3rd Reg		4th Reg		Typical (Mean) Regiment	% of Day
	Min.	(%)	Min.	(%)	Min.	(%)	Min.	(%)		
Class	259.0	(18%)	265.6	(18%)	247.9	(17%)	258.9	(18%)	257.7	17.96%
Study	279.0	(20)	284.2	(20)	302.8	(21)	297.8	(21)	291.2	20.29
Org. Phys. Act.	70.4	(5)	71.7	(5)	71.0	(5)	70.5	(5)	70.9	4.94
Extracur. Act.	17.5	(1)	16.3	(1)	19.3	(1)	17.6	(1)	17.7	1.23
Official Bus.	95.6	(7)	78.0	(5)	88.9	(6)	87.0	(6)	87.3	6.08
Personal Bus.	110.1	(8)	108.1	(8)	110.3	(7)	102.6	(7)	107.8	7.51
Optional/Rec.	75.6	(5)	94.6	(7)	90.9	(6)	81.4	(6)	85.7	5.97
Mealtime	129.6	(9)	130.8	(9)	132.5	(9)	129.6	(9)	130.6	9.10
Sleep	386.8	(27)	395.9	(27)	382.9	(26)	379.6	(27)	386.2	26.91
Total of Means	1423.6		1445.2		1446.5		1425.0		1434.9	100.0%
% of 1440	98.86%		100.36%		100.45%		98.95%		99.65%	

4. RESULTS

a. Cadet Use of Time. Part I of the survey asked cadets to record their activities for a 24-hour period in terms of nine time-use categories. The mean values obtained in the current study (1975) and in the previous study (1971) are presented by class in Table 3.

TABLE 3
MEAN USE OF TIME BY CADETS*

Activity	1 ^o		2 ^o		3 ^o		4 ^o		Corps			
	'75	'71	'75	'71	'75	'71	'75	'71	Mean		'75	'71
Class	265	263	263	242	248	284	257	278	256	267	17.9%	18.7%
Study	270	254	287	271	345	273	258	224	290	256	20.2	17.9
Org. Phys. Act.	45	57	55	60	58	65	102	96	65	70	4.5	4.9
Extracur. Act.	21	13	24	22	15	19	15	20	19	19	1.3	1.3
Official Bus.	90	84	65	72	60	65	121	123	84	86	5.9	6.0
Personal Bus.	125	121	109	117	103	116	101	100	110	114	7.6	8.0
Optional/Rec.	113	115	113	114	85	70	59	48	93	87	6.5	6.1
Mealtime	119	108	123	109	134	120	138	123	129	115	9.0	8.0
Sleep	384	408	385	425	390	423	386	402	386	415	27.0	29.0
Total	1432	1423	1423	1432	1438	1435	1437	1414	1432	1429	100.0	100.0
N	565		666		849		993		3073			

*Data are mean values in minutes, averaged for the five weekdays surveyed. Definitions of time use categories are given in Appendix I. Corps values are unweighted averages of class means and % of total minutes.

The most significant changes during the intervening period appear to be a trend towards more study time, slightly more meal time, and slightly less class time, as defined (see Appendix I). It is notable that, although class time for the Corps as a whole has decreased by 11 minutes, class time for the 1^o and 2^o has increased two minutes and 21 minutes, respectively, while class time for the 3^o and 4^o has decreased 36 minutes and 21 minutes, respectively. The increase of 34 minutes for Corps study time is due largely to the increased study time of the 3^o and 4^o by 72 minutes and 34 minutes, respectively.

b. Overall Adequacy of Time for All Activities. Part II of the survey included a series of questions which asked cadets to evaluate the extent, if any, of overload and to comment on which kinds of activities should be expanded or reduced. The cadet responses, in percentages, to a question as to the overall adequacy of time to fulfill required tasks to their satisfaction are given in Table 4 (Question "D").

TABLE 4
ADEQUACY OF TIME FOR OVERALL DEMANDS

Adequacy Level (& Score)	Percent Responding									
	1 ^o		2 ^o		3 ^o		4 ^o		Corps	
	'75	'71	'75	'71	'75	'71	'75	'71	'75	'71
Much less than adequate (1)	29%	28%	19%	24%	16%	23%	10%	16%	17%	22%
Less than adequate (2)	47	55	54	53	51	55	51	58	51	56
Usually adequate (3)	22	16	25	21	29	21	38	24	30	21
More than adequate (4)	2	1	2	2	2	1	1	1	2	1
Much more than adequate (5)	1	1	1	1	-	1	-	-	-	-
Number Responding	562	664	662	776	854	969	987	1019	3065	3428
Mean Score	1.99	1.92	2.11	2.02	2.19	2.01	2.32	2.11	2.18	2.03
Standard Deviation	0.81	0.73	0.74	0.75	0.74	0.72	0.68	0.67	0.74	0.72

The results of the current study show all classes perceiving the time available to be more adequate than they did during the previous study. This decrease in overall time pressure is reflected in the 68% of the Corps which finds the amount of time "less than adequate" compared to the 78% of the Corps which found the amount of time "less than adequate" during the previous study.

c. Judged Adequacy of Time to Complete Academic Study Assignments. Table 5 gives the cadet responses, in percentages, to a second question asking cadets if they generally have adequate time to meet academic demands to their satisfaction (Question E).

TABLE 5
ADEQUACY OF TIME FOR ACADEMICS

Response (& Score)	Percent Responding								Corps	
	1°		2°		3°		4°			
	'75	'71	'75	'71	'75	'71	'75	'71	'75	'71
YES (1)	<u>18%</u>	<u>13%</u>	<u>20%</u>	<u>19%</u>	<u>24%</u>	<u>15%</u>	<u>32%</u>	<u>16%</u>	<u>25%</u>	<u>16%</u>
NO (0)	<u>82</u>	<u>87</u>	<u>80</u>	<u>81</u>	<u>76</u>	<u>85</u>	<u>68</u>	<u>84</u>	<u>75</u>	<u>84</u>
Primarily because of:										
Official duties	13	13	5	6	2	2	11	13	7	8
Athletics	1	1	2	1	2	1	2	1	2	1
Unsatisfactory study climate in barracks	5	4	6	7	4	6	6	7	5	6
Academic workload too heavy	30	30	33	31	36	34	12	18	27	28
Too many other required activities	27	28	26	30	27	33	31	38	28	33
Other	6	11	7	7	5	10	6	6	6	8
Number Responding	559	661	660	772	852	960	977	1012	3048	3405

As in the previous section, these data reflect increased adequacy of time as perceived by the Corps as a whole and by each class. The most significant changes occurred in the 4^o and 3^o whose perceptions of time adequacy increased by 16 and 9 percentage points, respectively. There was also a notable decrease in perceived inadequacy of time because of "too many other required activities" as reflected by a decrease of five percentage points during the intervening period.

d. How Cadets Would Use Any Extra Time Provided Them. The cadets were asked to estimate how they would use an extra hour of time per weekday (e.g., by a reduction in class time), (Question "B"). Their mean allocations are given in Table 6, together with the percentages of the total for the Corps.

TABLE 6
HOW EXTRA TIME WOULD BE USED, MEAN MINUTES BY CLASS AND CORPS

Category	1 ^o		2 ^o		3 ^o		4 ^o		Corps			
	Mean		Mean		Mean		Mean		%		%	
	'75	'71	'75	'71	'75	'71	'75	'71	'75	'71	'75	'71
Study	18	15	17	18	19	18	22	22	19	19	31%	32%
Sleep	13	17	13	17	14	15	12	14	13	16	21	27
Optional Rec.	11	13	12	11	12	12	8	9	11	11	18	19
Personal Bus.	7	6	7	6	6	6	7	7	7	6	11	10
Org. Phys. Act.	4	3	5	4	4	4	3	3	4	3	7	5
Extracur. Act.	3	3	4	3	4	4	4	3	4	3	7	5
Official Bus.	4	2	2	2	1	1	4	2	3	1	5	2
Totals	60	59	60	61	60	60	60	60	61	59	100%	100%
Sample N	571	651	673	771	861	976	994	1006	3099	3404		

The mean allocations of extra time are surprisingly consistent between the two studies. The most notable difference is that all classes would allocate less of the extra time for sleep. The 1^o and 2^o cadet allocations for sleep decreased by four minutes out of the 17 minutes allocated in 1971, a decrease of 23.5%.

e. Cumulative Fatigue Status. The percentage responses to question F, usual level of cumulative fatigue, for the current study (1975) and the previous study (1971) are given in Table 7. The data reflect a significant decrease in cumulative fatigue between the two studies. This finding is consistent with the conclusions of previous sections of this report which found an increase in the perceived adequacy of time.

The data in Table 7 also suggest that cadets in the First Class typically are consistently more nearly exhausted than are the cadets in the other classes. The detailed data (see Appendix II) show even more sharply this significant difference in distribution of responses and the smaller average improvement in 1975 over 1971 (chi square test, $p < .01$..)

TABLE 7
PERCENT OF CLASS WITH EACH USUAL LEVEL OF CUMULATIVE FATIGUE

<u>Response</u>	1975 Sample				<u>Corps</u>	<u>1971 Corps</u>
	<u>1^o</u>	<u>2^o</u>	<u>3^o</u>	<u>4^o</u>		
Tired occasionally (1+2)	43%	48%	50%	47%	47%	38%
Extended fatigue (3)	49	46	46	49	47	53
Always tired (4+5)	8	6	5	4	6	9
Mean	2.63	2.56	2.52	2.56	2.56	2.70
Std. Dev.	.72	.70	.68	.63	.68	.70

f. The Hardest Year in Terms of Required Load. Cadets in the upper three classes indicated which year they had perceived as the hardest in terms of academic workload and again in terms of overall load (Questions G and H). The results for both the current and the previous study are shown in Table 8.

There are substantial changes for both perceived academic workload and perceived overall load during the intervening period. Ratings by First Classmen rank the 1^o year as the hardest for both academics and overall. The current study shows an increase of 15 percentage points of First Classmen ranking the 1^o year as hardest academically and compensating decreases of 11 percentage points for 2^o year and 5 percentage points for 3^o year. Second Classmen ratings of overall load show a decline of 10 percentage points for 2^o year and an increase of 6 percentage points for 4^o year, making the two years essentially indistinguishable relative to overall load. In both 1971 and 1975, the Second and Third Classmen rated 3^o year as easiest in terms of overall load, but hardest in terms of academic load.

TABLE 8
THE PERCENT INDICATING EACH CLASS YEAR EXPERIENCED HAD THE HARDEST
ACADEMIC LOAD AND OVERALL LOAD

<u>Year Rated</u>	<u>Academics Rated By</u>						<u>Overall Rated By</u>					
	<u>1^o</u>		<u>2^o</u>		<u>3^o</u>		<u>1^o</u>		<u>2^o</u>		<u>3^o</u>	
	<u>'75</u>	<u>'71</u>	<u>'75</u>	<u>'71</u>	<u>'75</u>	<u>'71</u>	<u>'75</u>	<u>'71</u>	<u>'75</u>	<u>'71</u>	<u>'75</u>	<u>'71</u>
1 ^o	49%	34%	-	-	-	-	64%	66%	-	-	-	-
2 ^o	11	22	38	34	-	-	7	11	38	48	-	-
3 ^o	36	41	57	60	92	92	11	7	23	19	40	41
4 ^o	4	3	5	5	7	8	18	15	39	33	58	59
N	565	664	665	772	854	963	560	764	662	767	850	957

g. Extent of Active Participation in Extracurricular Activities. The cadets were asked to indicate the number of different kinds of extracurricular activities in which they actively participated during an average week (Question I). The mean number of extracurricular activities, percent with none, percent with seven or more, and percent with ten or more are shown in Table 9 for both the current and the previous study.

TABLE 9
ACTIVE PARTICIPATION IN EXTRACURRICULAR ACTIVITIES

	1°		2°		3°		4°		Corps	
	'75	'71	'75	'71	'75	'71	'75	'71	'75	'71
% 10 or More	0.9%	0.5%	1.6%	1.3%	0.6%	1.3%	0.2%	1.6%	0.8%	1.2%
% 7 or more	1.4	0.5	2.6	1.7	1.0	1.9	0.5	1.8	1.2	1.6
% None	31.0	41.7	18.1	26.6	22.6	29.6	32.8	32.6	26.4	32.1
N	565	669	665	785	846	991	987	1029	3063	3474
Mean	1.48	1.04	2.04	1.93	1.69	1.70	1.31	1.64	1.61	1.61
Std. Dev.	1.90	1.64	2.39	5.55	1.91	3.46	1.40	3.96	1.90	3.95

The overall mean number of extracurricular activities participated in remains constant at 1.61 for the Corps. However, the standard deviation has been approximately halved during the intervening years between studies. This factor and the decreased number of non-participants indicate that, in general, more cadets are participating in extracurricular activities than were participating in 1971 but that overall fewer cadets are participating in numerous extracurricular activities.

h. Intensive Participation in Extracurricular Activities. In addition to devoting considerable time to extracurricular activities by participating in a relatively large number, intensive participation would require much time. Hence, the cadets were asked to list any extracurricular activities to which they currently were devoting an average of at least five hours a week. A few cadets reported participating thus in more than three activities. The frequency with which each number of such intensive-participation activities were reported for each class is shown in Table 10, for the current study and for the previous study.

TABLE 10
PERCENT TYPICALLY PARTICIPATING INTENSIVELY IN EXTRACURRICULAR ACTIVITIES

Number of Activities	1°		2°		3°		4°		Corps	
	1975	1971	1975	1971	1975	1971	1975	1971	1975	1971
None	62.8%	77.0%	56.2%	71.1%	61.6%	78.0%	69.2%	76.0%	63.1%	75.6%
1	29.8	20.3	34.0	24.2	31.7	18.0	24.0	20.3	29.4	20.5
2	5.6	2.1	8.4	3.8	5.5	3.3	5.8	3.2	6.2	3.2
3 or More	1.8	0.6	1.5	0.9	1.2	0.7	1.0	0.5	1.3	0.7
(One or More)	(37.2)	(23.0)	(43.8)	(28.9)	(38.4)	(22.0)	(30.8)	(24.0)	(36.9)	(24.4)
Cadets	570	669	671	785	860	991	993	1029	3094	3474
Mean Act. Per Cadet	.463	.263	.551	.345	.462	.267	.387	.282	.457	.288
Std. Dev.	.683	.522	.710	.597	.654	.552	.644	.544	.671	.556

The data show substantial change toward increased intensive participation by cadets. For each class, as well as for the Corps as a whole, the current study shows a decrease in number of non-participants and an increase in each of the participating (one or more) categories. The mean number of activities per cadet shows a corresponding increase of 58 percent for the Corps. The smallest increase in mean number of activities occurred for the 4^o which increased only 37 percent above the mean for the previous study.

i. Use of Time for Week. The cadets were asked to estimate the number of minutes spent, during the most recent weekend (48 hours), on each of eleven types of activities. On the average day on the weekend, the cadets use their time as shown in Table 11, for both the current study and the previous study. Since class time and chapel time occur on only one day, their weekend means were NOT divided by two. In order to provide data reflecting more accurately the use of time by cadets while at USMA, cadets away as much as 70% of the 48 hour weekend were not included in the figures in the table. The mean total times reported for weekend leave/trips by the total groups were: 1^o--901, 2^o--496, 3^o--229, 4^o--78, and total Corps--362 minutes. The higher the class the larger the understatement by the value given in the table for "Leave/Trips."

The average use of time for the Corps on a typical weekend in 1975 compared to a typical weekend in 1971 is typified by a decrease in sleep time of 26 minutes, a decrease in chapel attendance of 44 minutes, an increase of Leave/Trips time by 74 minutes, and an increase in study time of 26 minutes.

TABLE 11
AVERAGE USE OF TIME (IN MINUTES) ON A TYPICAL WEEKEND DAY*

Category	1 ^o		2 ^o		3 ^o		4 ^o		Corps	
	1975	1971	1975	1971	1975	1971	1975	1971	1975	1971
Class**	104	120	125	129	167	175	109	108	128	135
Study	192	161	161	156	191	172	171	130	178	152
Org. Phys. Act.	13	15	18	21	20	25	32	36	23	27
Extracur. Act.	17	20	36	22	33	19	34	27	31	28
Official Bus.	49	61	46	53	46	52	43	59	45	56
Personal Bus.	59	68	83	77	76	70	79	70	76	71
Optional/Rec.	168	192	246	263	255	264	274	267	245	255
Mealtime	66	72	76	74	75	78	93	86	79	79
Sleep	411	514	458	534	480	546	543	587	483	557
Leave/Trips***	303	174	150	45	83	18	33	13	116	42
Chapel**	35	70	36	83	38	85	51	96	42	86
Totals	1417	1467	1435	1457	1464	1504	1462	1479	1446	1488

*Only for cadets at West Point at least 30% of the time.

**Class only on Saturday and Chapel only on the Sabbath day.

***Marked underestimates for the upperclasses, since cadets away for as much as 70% of the 48 hours were excluded.

Table 12 shows the total number of hours in a week used for each category of activity.

TABLE 12
APPROXIMATE NUMBER OF HOURS PER WEEK TYPICALLY SPENT IN
EACH CATEGORY OF ACTIVITIES AT USMA

Activity Category	1 ^o		2 ^o		3 ^o		4 ^o		Corps	
	1975	1971	1975	1971	1975	1971	1975	1971	1975	1971
Class	23.8	23.9	24.0	22.3	23.5	26.6	23.2	25.0	23.5	24.7
Study	28.9	26.6	29.2	27.8	35.1	28.4	27.2	23.0	30.1	26.2
Org. Phys. Act.	4.2	5.2	5.2	5.7	5.5	6.2	9.6	9.2	6.2	6.8
Extracur. Act.	2.3	1.7	3.2	2.6	2.4	2.2	2.4	2.6	2.6	2.3
Official Bus.	9.1	9.0	7.0	7.8	6.5	5.4	11.5	12.2	8.5	9.1
Personal Bus.	12.4	12.3	11.8	12.3	11.1	12.0	11.8	10.6	11.7	11.7
Optional/Rec.	15.0	16.0	17.6	18.3	15.6	14.6	16.9	12.9	15.8	16.6
Mealtime	12.1	11.4	12.8	12.4	13.7	12.6	13.9	13.1	13.4	12.3
Sleep	45.7	51.2	47.4	53.2	48.5	53.4	50.3	53.4	48.3	53.0
Leave/Trips*	5.0	5.7	2.5	1.5	1.4	0.5	0.6	0.4	1.9	1.4
Chapel	0.6	1.2	0.6	1.4	0.6	1.4	0.8	1.6	0.7	1.4
Totals	159.2	164.2	161.2	165.2	163.8	163.6	168.1	164.0	162.8	165.6
% 168 Hours Accounted For	94.8%	97.7%	96.0%	98.3%	97.5%	97.4%	100.0%	97.6%	96.9%	98.6%

*Significant underestimates for the upper classes.

In comparison to 1971, the time typically spent per week in study and leave/trips increased for the Corps as a whole, while average time spent for class, chapel, and sleep decreased for the Corps. Study time increased from 26.23 hours per week to 30.10 hours per week, with all classes showing an increase and with the 3^o having the largest increase of 6.69 hours per week, giving them an average of 35.12 hours of study per week. The typical weekly time spent for leave/trips for the Corps rose from 1.40 to 1.93 hours. The largest increases were for the 2^o which increased from 1.48 hours to 2.50 hours, and the 3^o which increased 300% from 0.48 to 1.38 hours.

The average weekly time spent in class decreased by approximately one hour for the Corps. The average time spent sleeping decreased from 53 hours per week to 48.3 hours per week with all classes showing decreases and the 2^o showing the largest decrease of 5.9 hours per week. Chapel attendance decreased to about 50% of the average weekly time spent in chapel in 1971.

5. SUMMARY

The comparison of the results of the Cadet Time Study conducted in 1975 with the study conducted in 1971 shows the following changes during the intervening period:

a. The Corps, as a whole, spends a weekly average of 1.2 hours per week less in class, 3.9 hours per week more in study, 1.0 hours per week more at mealtimes and 4.8

hours per week less in sleep in 1975 than they did in 1971. Additionally, the average time spent in chapel has decreased to about 50% of what it was in 1971, and time spent in leave/travel has increased by 0.5 hours per week with a 300% increase for the 3^o.

b. Given an extra 60 minutes to allocate among activities, all classes surveyed in 1975 indicated they would allocate less of the extra time for sleep than their counterparts indicated in 1971.

c. The total time available to cadets is perceived to be more adequate in 1975 than it was in 1971.

d. The 1975 data indicate a decrease in the level of cumulative fatigue compared to the 1971 Cadet Time Survey.

e. The 1^o year is judged to be the most difficult year both academically and in terms of overall load. The 3^o year appears the second most difficult year academically, while the 4^o year is perceived as the second most difficult year in terms of overall load but the easiest year academically.

APPENDIX I



MAOR

DEPARTMENT OF THE ARMY
UNITED STATES MILITARY ACADEMY
WEST POINT, NEW YORK 10996

1 December 1975

To Each Member of the Corps of Cadets:

By authority of the Superintendent, the attached Cadet Time Survey is being conducted during the period 8-12 December to collect data for the Academic and Training Committee's current study of the intensity of cadet workloads and schedules. This is a very important study; its effectiveness will depend critically on the quality of the information that you provide.

Please read the instructions carefully, and answer the questions as thoughtfully and as accurately as you can.

Incl
as

George D. Waters

GEORGE D. WATERS

LTC, CE

Director of Institutional Research



INSTRUCTIONS

1. This survey consists of three parts. Part I consists of the identification blanks and a table for the detailed recording of the allocation of your time during a particular weekday. The day for which you are to complete the table will be determined from the table below, in order to insure that data from the entire Corps are spread over all days of the week. To improve the accuracy of your estimates you are requested to fill out the table as the 24-hour period progresses rather than wait until the end of the period.

The assignment of your day for Part I will be according to the next to last digit of your cadet number. Use this table to determine the 24-hour period for which you should complete Part I:

<u>Next to Last Digit of Cadet Number</u>	<u>Period</u>
0 or 1	0610 Monday to 0610 Tuesday
2 or 3	0610 Tuesday to 0610 Wednesday
4 or 5	0610 Wednesday to 0610 Thursday
6 or 7	0610 Thursday to 0610 Friday
8 or 9	0610 Friday to 0610 Saturday

2. Part II consists of a number of questions calling for your judgment or recall. This part should be completed as soon as possible after the completion of the time survey table in Part I; in fact, all questions except IIA and B can be completed earlier, prior to completion of Part I.

3. Part III consists of a number of questions pertaining to cadet Military Field Training.

4. This survey is being conducted by authority of Title 10, US Code 4334. The results will be used for research purposes only and will not become a part of your record. You are not required to answer any question you feel is objectionable or provide the data requested. However, your failure to do so will result in incomplete data for this study.

5. The completed questionnaire is to be turned in as directed by your Company Tactical Officer and the Cadet Chain of Command.

CODES

Use these code numbers to indicate your rank, chain of command and corps squad activity as requested at the top of page 4.

<u>Cadet Chain of Command</u> <u>Assignment</u>	<u>Code</u> <u>No.</u>	<u>Current Corps Squad</u> <u>Activity</u>	<u>Code</u> <u>No.</u>
Commander/Leader	9	Volleyball	21
Deputy/XO	8	Water Polo	20
Adjutant	7	Football	19
Operations	6	150-lb Football	18
Training	5	Cross-Country	17
Supply	4	Soccer	16
Activities	3	Basketball	15
Athletic	2	Fencing	14
Administrative	1	Gymnastics	13
Colors	0	Hockey	12
None	Leave Blank	Pistol	11
		Rifle	10
		Skiing	09
		Squash	08
		Swimming	07
		Wrestling	06
		Baseball	05
		Golf	04
		LaCrosse	03
		Tennis	02
		Track	01
		None	00
<u>Cadet Rank</u>	<u>Code</u> <u>No.</u>		
CPT (6-Stripe)	9		
CPT (5-Stripe)	8		
CPT (4-Stripe)	7		
LT	6		
CMD SGT MAJ	5		
PLT SGT	3		
SGT	2		
CPL	1		
PVT	0		

TIME-USE CATEGORIES

To complete the survey accurately, it is necessary to use the following definitions of time-use categories. Read them carefully, and refer back to them as necessary while filling in the Table and answering the questions.

In Class - Include academic and military classes, lectures, and labs; include time spent walking to and from class. Do NOT include PE classes.

Study - Include preparation for class or exams, writing requirements and additional instruction. Do NOT include study of Fourth Class knowledge.

Organized Physical Activity - Include participating in PE class, intramurals, Corps Squad and those competitive athletic clubs which are authorized in lieu of intramurals, correctional exercise, PT tests. Include travel and dressing time.

Extracurricular Activity - Include participating in or administering any authorized extracurricular activity of a non-athletic nature. Do NOT include unorganized recreational activities.

Official Business - Include chain of command duties, administrative duties, and directed activities to include preparing for and attending inspections in rooms and ranks, drill and ceremonies, official trips to Cadet Tailor, counseling, punishment tours, CQ, Guard Duty, Fourth Class duties, study of Fourth Class knowledge, Special Inspections, etc.

Personal Business - Include non-directed but required activities such as sick call, dental appointments, haircuts, laundry, personal hygiene, etc.

Optional/Recreational - Include individual recreational or leisure activities such as movies, escorting, letter writing, reading, religious activity, rap sessions, and unorganized recreational activities not counted as part of Organized Physical Activity or Extracurricular Activity, e.g., a pickup basketball game, tennis, bridge, etc.

Mealtime - Include time spent in the Cadet Mess, the preceding formation, and returning to company area.

Sleep - Sleeping or napping in barracks.

PART I

(1-5) Cadet No. (Last 5 digits):

(6) Circle Class Year: 1 2 3 4

(7-8) Cadet Co.:

(9-12) Date Completed:

(Day/Month)

(13) Circle Day Covered:

M Tu W Th F

From CODES, on p. 2, copy code for your: (14) Chain of Command Assignment:

(15) Cadet Rank:

(16-17) Corps Squad in which now active:

The Table below applies to a 24-hour time period from 0610 to 0610. In the spaces provided, indicate the number of minutes expended in each category (to the nearest 5 minutes). Add columns; check all row totals by adding rows.

PERIOD	No. Min.	Class	Study	Org Phys Acty	Extra-Curr. Acty	Off Bus	Pers Bus	Op-tional Rec	Meal-Time	Sleep	Row Total Should Be
0610-0750	100										100
0750-0910	80										80
0910-1035	85										85
1035-1215	100										100
1215-1305	50										50
1305-1415	70										70
1415-1540	85										85
1540-1815	155										155
1815-2000	105										105
2000-2300	180										180
2300-0610	430										430
TOTAL	1440										1440
		(18-20)	(21-23)	(24-26)	(27-29)	(30-32)	(33-35)	(36-38)	(39-41)	(42-44)	

PART II

INSTRUCTIONS:

In the boxes provided at the end of each question or sub-question, write the number indicating your answer. Place a "0" or another digit in each box. Ignore numbers in parentheses.

A. What, if any, reallocation of time among the following categories would you recommend as improving your overall development in consonance with the mission of USMA? (Indicate, to the nearest 5 minutes, the average daily amount of time you would add to or subtract from the time now available for each category. Total of "+" and "-" changes should sum to zero.)

CLASS	<u>ADD</u>				<u>SUBTRACT</u>		
Academics				(45-47)	-		
Tactics				(48-50)	-		
STUDY				(51-53)	-		
ORGANIZED PHYSICAL ACTIVITY							
PE Class				(54-56)	-		
Intramurals				(57-59)	-		
Corps Squad				(60-62)	-		
EXTRACURRICULAR ACTIVITY				(63-65)	-		
OFFICIAL BUSINESS				(66-68)	-		
PERSONAL BUSINESS				(69-71)	-		
OPTIONAL/RECREATIONAL				(72-74)	-		
SLEEP				(75-77)	-		

(The two totals should check)

(80,
Cd No:1)

B. With your current incentives and interests, if 60 minutes of additional time were made available to you each weekday (e.g., by reduction in certain classes), estimate how you would use this time. (Allocate the 60 minutes among the activity areas; write "0" where appropriate.)

Study	(6-7)		
Organized Physical Activity	(8-9)		
Extracurricular Activity	(10-11)		
Official Business	(12-13)		
Personal Business	(14-15)		
Optional/Recreational	(16-17)		
Sleep	(18-19)		
TOTAL		6	0

Min

C. Making use of your best ability at recollection, estimate the minutes you spent on each of the following activities during the most recent weekend, defined as the time from 0610 Saturday to 0610 Monday. Check by adding. The total should be 2880 minutes.

Class	(20-22)				
Study	(23-25)				
Weekend Leave and Official Trips	(26-29)				
Organized Physical Activity	(30-32)				
Extracurricular Activity	(33-35)				
Chapel and Related Activities	(36-38)				
Official Business	(39-41)				
Personal Business	(42-44)				
Optional/Recreational	(45-47)				
Mealtime	(48-50)				
Sleep	(51-54)				
TOTAL		2	8	8	0

D. Given the demands now imposed on you during a typical weekday (study, sleep, class, athletics, chain of command duties, routine administration, etc.), how adequate for you is the time available for you to accomplish these tasks to your satisfaction?

(55)

1. Much less than adequate
2. Less than adequate
3. Usually adequate
4. More than adequate
5. Much more than adequate

E. More specifically, do you generally have adequate time to complete your academic study assignments to your satisfaction?

(56)

1. Yes
- No, primarily because of: (Choose only one)
2. Official duties
3. Athletics
4. Unsatisfactory study climate in barracks
5. Academic workload too heavy
6. Too many other required activities
7. Other (Specify here)

F. Which of the following best characterizes your usual cumulative fatigue status this term?

(57)

1. I seldom get really tired; I am usually physically energetic.
2. I naturally get tired occasionally, but quickly recover and have no cumulative fatigue for more than one day.
3. I have been very tired for extended periods of time and at times have felt completely exhausted.
4. I am always very tired and frequently am almost completely exhausted.
5. I stay on the verge of complete mental and physical exhaustion.

G. Which year in your experience to date has been the hardest in terms of academic workload. (NOTE: Compare only those years you have experienced.)

(58)

1. 1^o
2. 2^o
3. 3^o
4. 4^o

H. Which year in your experience to date has been the hardest in terms of overall load (academic, military, physical, etc.). (NOTE: Compare only those years you have experienced.)

(59)

1. 1^o
2. 2^o
3. 3^o
4. 4^o

I. During an average week, in how many different kinds of extracurricular activities do you actively participate?

(60-61)

<input type="text"/>	<input type="text"/>
----------------------	----------------------

J. To how many different extracurricular activities do you currently devote an average of at least five hours a week.

(62)

0. None
1. One
2. Two
3. Three or more

PART III

INSTRUCTIONS:

This part relates to your impressions concerning military training. In answering these questions, consider the Military Training at USMA, specifically that given in the field. (Field Training does not include drill, ceremonies and similar non-tactical training but does include skills training such as received during Cadet Field Training at Camp Buckner and Cadet Basic Training.) In the boxes provided at the end of each question, write the number indicating your answer. Ignore the numbers in parentheses.

To answer questions A and B, use this code:

1. Much greater than expected
2. Somewhat greater than expected
3. About what I expected
4. Somewhat less than expected
5. Much less than expected

A. The amount of Military Field Training I have received thus far has been:

(63)

B. The total amount of Military Field Training in the USMA program is:

(64)

To answer questions C-I, use this code:

1. Strongly agree
2. Agree
3. No firm opinion
4. Disagree
5. Strongly disagree

C-E. I would be in favor of the following periods of field training/weapons firing, land navigation, company, platoon and squad tactics, etc., during the academic year (not to interfere with free time):

C. Several 1-day periods. (65)

D. Two, 2-day continuous periods. (66)

E. One, 3-day continuous period. (67)

F-1. The following Military Training would be very beneficial to my overall professional development:

F. Field Training with weapons firing (FTX). (68) ☐

G. Field Training without weapons firing but with equipment. (69) ☐

H. Classroom instruction with some field work two or three times a year. (70) ☐

I. Classroom instruction during the academic year. (71) ☐

J. Additional Military Field Training during the academic year would have the following effect upon my motivation toward a career as an Army officer:

(72) ☐

1. Significantly increase
2. Somewhat increase
3. Have no effect
4. Somewhat decrease
5. Significantly decrease

To answer questions K-M, use this code:

1. Very positive impact
2. Slightly positive impact
3. No effect
4. Slightly negative impact
5. Very negative impact

K-M. One-, two-, or three-day periods of Military Field Training during the academic year would impact upon the continuity of my studies as follows:

K. Several 1-day periods of Military Field Training. (73) ☐

L. Two, 2-day continuous periods of Military Field Training. (74) ☐

M. One, 3-day continuous period of Military Field Training. (75) ☐

(80, Cd No. 2)

APPENDIX II

PERCENT OF CLASS GIVING EACH CHARACTERIZATION OF "USUAL CUMULATIVE FATIGUE STATUS" IN 1975 AND 1971

Response	1°		2°		3°		4°		Corps		N	
	1975	1971	1975	1971	1975	1971	1975	1971	1975	1971	1975	1971
Seldom Tired (1)	4%	2%	3%	3%	4%	2%	2%	3%	3%	3%	96	86
Occasionally Tired (2)	39	33	45	34	46	35	44	37	44	35	1337	1199
Extended Fatigue (3)	49	56	46	54	46	54	49	50	47	53	1440	1813
Always Very Tired (4)	7	8	5	8	4	8	4	10	5	8	140	286
Stay Exhausted (5)	1	1	2	1	1	1	-	1	1	1	29	33
Number Reporting	561	664	658	771	840	968	983	1014	3042	3417	3042	3417
Mean Fatigue Score	2.63	2.72	2.56	2.71	2.52	2.70	2.56	2.68	2.56	2.70		
Standard Deviation	0.72	0.65	0.70	0.71	0.68	0.70	0.63	0.71	0.68	0.70		
Improvement ('71 Mean- '75 Mean)	.09		.15		.18		.12		.14			

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
9B2, 01-76-012		
4. TITLE (and Subtitle)		5. TYPE OF REPORT & PERIOD COVERED
COMPARISON OF TIME USAGE BY CADETS, 1971 VS 1975		
7. AUTHOR(s)		6. PERFORMING ORG. REPORT NUMBER
Mr. Claude F. Bridges and Mr. Ted G. Davidson		
9. PERFORMING ORGANIZATION NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
Office of the Director of Institutional Research United States Military Academy West Point, New York 10996		Project Number 214
11. CONTROLLING OFFICE NAME AND ADDRESS		12. REPORT DATE
Same as #9 above.		March 1976
		13. NUMBER OF PAGES
		24 + ii
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report)
United States Military Academy West Point, New York 10996		Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)		
Reproduction of this document in whole or in part must have prior approval of the Superintendent, United States Military Academy, West Point, New York.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
Academic study Extracurricular activities Scheduling Time usage Work schedule		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		
<p>For an assigned day during the period 8-12 December 1975, each cadet was asked to keep a log of the time he spent on each major type of activity, essentially replicating the time survey conducted during the period 29 March - 3 April 1971.</p> <p>Comparisons of the two sets of data indicate that, in one week, cadets typically devote about one hour less to class, four hours more to studying, and almost five hours less to sleeping than they did in 1971.</p> <p>There were several indications of appreciable improvement in the match between the demands on the cadets and the time and energy available and attitude towards meeting these demands. In spite of sleeping 41 minutes less per day, there were significant decreases in perceived cumulative fatigue, inadequacy of time to meet demands, and in the percent of extra time that would be used for sleeping.</p> <p>Significantly less time is devoted to organized physical activities, but more time is spent on extracurricular activities. The load on the First Classmen remains greater than that on other classes.</p>		

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)